# Brain Seed • Quick Start

## Read First!

Improper or unsafe installation can cause damage to property or people. Turn off your modular system before installing. Be sure to connect your Brain Seed to the correct pins on the distribution board, and to connect the power connector with the correct polarity. -12 is labeled as "Stripe" on the PCB power connector. If you are unsure of the correct installation of this device, do not attempt installation, seek the help of a qualified technician.

## What the hell did I buy?

The Brain Seed's primary function is to be a step recorder that provides sequences for modules (oscillators, filters, etc..). It requires an external clock source to provide timing (typically an LFO). It records CV input into the Seed In jack as steps. The Seed In CV can come from LFOs, other sequencers, midi to CV interfaces, controllers, etc...

The ReSeed button and input jack handle arming recording. When ReSeed is armed, the Cycle LED will blink red upon receiving a clock signal, and the Brain Seed will store a snapshot of what voltage is present at the Seed In jack at the exact time that each clock Cycle is received (similar to how a sample and hold module samples signals).

If nothing is plugged into the Seed In and ReSeed is armed, the Brain Seed will generate random 0-5 volt voltage for each Cycle received.

Length, Cycle Mode, and Quantizer buttons display settings utilizing four possible states of their LEDs (off/green/orange/red).

Gate inputs (ReSeed/Cycle/Freeze-Reset) activate for any voltage source that goes over + 1.5 volts.

See the graphic to the right for a breakdown of functions.

The Brain Seed can be a simple quantizer, a random generator, a motion detector, a mono arpeggiator, a strummer, and more. For details on these patches, download the full manual at antimatteraudio.com

For troubleshooting, please download the manual. It has more thorough explanations of each function, and a very helpful frequently asked questions section that can instantly answer most support questions.

**Clip LED:** Lights up if the sum of the recorded data plus the shift input goes higher than 5 volts or lower than -5 volts to indicate that you are out of range.

**Seed in jack:** -5 volt to +5 volt CV input that is recorded by the Brain Seed. Try with the output of a CV source (LFO/Sequencer/Midi CV interface, etc..).

**ReSeed in jack:** Any signal over 1.5 volts will change the ReSeed state (if the toggle button is off, a signal will turn it on). This jack is momentary.

**Cycle in jack:** The Brain Seed's clock input that takes triggers, except in CV cycle mode. Try this with the output of an LFO .

**Cycle Mode button + LED:** This changes the behavior of the Cycle jack:

Off = Normal > trigger mode

Green = Bounce/Pendulum <> trigger

Orange = Random step selection

Red = CV addressed mode. -5 to +5 volt CV input to scrub the sequence position. Experiment with attenuated LFO, envelopes or mixed CV. Jumper makes range 0 to +5v. ***Activating ReSeed in CV Cycle mode while in Variable Length mode will switch to fixed Length mode.

**Freeze in jack:** Any signal over 1.5 volts halts the sequence. A jumper can change this into a standard sequencer reset.

**Trig Out jack:** Produces a trigger for each cycle. Try with an envelope that opens a filter or VCA. Fun in CV Cycle mode!
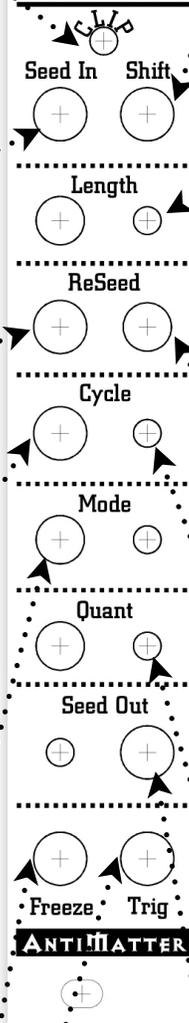
**Shift in jack:** -5 volt to +5 volt CV input that transposes the Seed Out.

**Length button + LED:** This sets the length mode for the sequence.

Off = Variable length mode, the sequence is as many steps as the recording (up to 1000) and resets each time ReSeed is engaged.

Green = 8-step fixed length mode

Orange = 16-step fixed length mode

Red = 32-step fixed length mode

*Hold for 1 second to save everything!

**ReSeed button:** Changes the ReSeed recording state. This button is toggled/latched.

**Cycle LED:** Indicates when the Brain Seed progresses one step.

Green = A regular step

Orange = The start of the sequence

Red = ReSeed is on

**Quant button + LED:** Changes the quantization of the Seed Out voltage.

Off = Unquantized output

Green = Quantized to nearest semitone

Orange = Quantized to major intervals

Red = Quantized to minor intervals

**Seed out jack + LED:** Main CV output, plug into the module that you want to sequence (volt per octave input of your oscillator, cutoff of your filter, etc…). LED indicates output level. Red = negative, Green = positive.

Download full manual at antimatteraudio.com !

## Brain Seed

CLIP

Seed In    Shift

Length

ReSeed

Cycle

Mode

Quant

Seed Out

Freeze    Trig

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